- 19. (New) The *in vitro* modified T cell of Claim 18, wherein the transfecting and stimulating are performed simultaneously.
- 20. (New) The *in vitro* modified T cell of Claim 19, wherein the transfecting is performed after the stimulating.
- 21. (New) The *in vitro* modified T cell of Claim 18, which is produced by isolating a lymphocyte from whole blood, the spleen, or a lymph node, wherein the lymphocyte is an irradiated donor T cell, an irradiated cell which expresses a dominant MHC molecule, or a recipient T cell;

culturing a cell line which produces a retrovirus that is suitable for gene transfer and which expresses a therapeutic gene; and

transferring the therapeutic gene into the graft recipient-specific T cell by culturing a mixed lymphocyte culture with the cell line which produces the retrovirus; or by contacting a mixed lymphocyte culture with a supernatant obtained from a culture of the cell line which produces the retrovirus, wherein the mixed lymphocyte culture comprises a donor T cell or cell which expresses a dominant MHC molecule with a recipient T cell.

- 22. (New) The *in vitro* modified T cell of Claim 21, wherein the retrovirus is a moloney murine leukaemia virus or a lentivirus.
- 23. (New) The *in vitro* modified T cell of Claim 21, wherein the therapeutic gene is transferred into the graft recipient-specific T cell by culturing a mixed lymphocyte culture with the cell line which produces the retrovirus.
- 24. (New) The *in vitro* modified T cell of Claim 21, wherein the therapeutic gene is transferred into the graft recipient-specific T cell by contacting a mixed lymphocyte culture with a supernatant obtained from a culture of the cell line which produces the retrovirus.
 - 25. (New) The *in vitro* modified T cell of Claim 18, which is produced by isolating a lymphocyte from whole blood, the spleen, or a lymph node, wherein the



lymphocyte is an irradiated donor T cell, an irradiated cell which expresses a dominant MHC molecule, or a recipient T cell; and

transferring the therapeutic gene into the graft recipient-specific T cell by incubating a mixed lymphocyte culture with a liposome formulation containing the therapeutic gene; or by treating a mixed lymphocyte culture with a gene gun containing the therapeutic gene, wherein the mixed lymphocyte culture comprises a donor T cell or cell which expresses a dominant MHC molecule with a recipient T cell.

26. (New) The *in vitro* modified T cell of Claim 25, wherein the therapeutic gene is transferred into the graft recipient-specific T cell by incubating a mixed lymphocyte culture with a liposome formulation containing the therapeutic gene.

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- 27. (New) The *in vitro* modified T cell of Claim 25, wherein the therapeutic gene is transferred into the graft recipient-specific T cell by treating a mixed lymphocyte culture with a gene gun containing the therapeutic gene.
- 28. (New) The *in vitro* modified T cell of Claim 18, wherein the therapeutic gene is a cytokine, an interleukin, a notch-ligand, a notch receptor, or a cell-protective gene.
- 29. (New) The *in vitro* modified T cell of Claim 18, wherein the therapeutic gene is IL-4, IL-10, viral IL-10, IL-12p40, IL-13, hemoxygenase-1, CTLA-4, hSerrate-1, hDelta-1, notch 1-4, bcl-2, bcl-xl, or bag-1.
- 30. (New) A process for generating a gene modified T-cell, comprising stimulating a T cell of a graft recipient in-vitro with a cell of a graft donor or with a cell which expresses a dominant MHC molecule to obtain a graft recipient-specific T cell; and

transfecting a immunomodulatory therapeutic gene into the graft recipient-specific T cell.

31. (New) The process of Claim 30, wherein the transfecting and stimulating are

performed simultaneously.

- 32. (New) The process of Claim 30, wherein the transfecting is performed after the stimulating.
- 33. (New) The process of Claim 30, wherein the T cell of the graft recipient, the T cell of the graft donor, and/or the cell which is expresses a dominant MHC molecule is an isolated lymphocyte from whole blood, the spleen, or a lymph node.
 - 34. (New) The process of Claim 30, wherein the isolated lymphocyte is irradiated.



35. (New) The process of Claim 30 wherein the therapeutic gene is transferred to the graft recipient-specific T cell by culturing a cell line which produces a retrovirus that is suitable for gene transfer and which expresses a therapeutic gene; and

transferring the therapeutic gene into the graft recipient-specific T cell by culturing a mixed lymphocyte culture with the cell line which produces the retrovirus; or by contacting a mixed lymphocyte culture with a supernatant obtained from a culture of the cell line which produces the retrovirus, wherein the mixed lymphocyte culture comprises a donor T cell or cell which expresses a dominant MHC molecule with a recipient T cell.

- 36. (New) The process of Claim 35, wherein the retrovirus is a moloney murine leukaemia virus or a lentivirus.
- 37. (New) The process of Claim 35, wherein the therapeutic gene is transferred into the graft recipient-specific T cell by culturing a mixed lymphocyte culture with the cell line which produces the retrovirus.
- 38. (New) The process of Claim 35, wherein the therapeutic gene is transferred into the graft recipient-specific T cell by contacting a mixed lymphocyte culture with a supernatant obtained from a culture of the cell line which produces the retrovirus.
- 39. (New) The process of Claim 30, wherein the T cell is isolated from whole blood, the spleen, or a lymph node; and where the method further comprises

transferring the therapeutic gene into the graft recipient-specific T cell by incubating a mixed lymphocyte culture with a liposome formulation containing the therapeutic gene; or by treating a mixed lymphocyte culture with a gene gun containing the therapeutic gene, wherein the mixed lymphocyte culture comprises a donor T cell or cell which expresses a dominant MHC molecule with a recipient T cell and at least one cell of the mixed lymphocyte culture is an irradiated cell.



- 40. (New) The method of Claim 36, wherein the therapeutic gene is transferred into the graft recipient-specific T cell by incubating a mixed lymphocyte culture with a liposome formulation containing the therapeutic gene.
- 41. (New) The method of Claim 36, wherein the therapeutic gene is transferred into the graft recipient-specific T cell by treating a mixed lymphocyte culture with a gene gun containing the therapeutic gene.
- 42. (New) The method of Claim 30, wherein the therapeutic gene is a cytokine, an interleukin, a notch-ligand, a notch receptor, or a cell-protective gene.
- 43. (New) The method of Claim 30, wherein the therapeutic gene is IL-4, IL-10, viral IL-10, IL-12p40, IL-13, hemoxygenase-1, CTLA-4, hSerrate-1, hDelta-1, notch 1-4, bcl-2, bcl-xl, or bag-1.
- 44. (New) A method of treating a patient for allogenic graft rejection, comprising administering the *in vitro* modified T cell of Claim 18 to the allogenic graft in the individual.
- 45. (New) The method of Claim 44, wherein the administration of the *in vitro* modified T cell induces and/or maintains a tolerance to the allogenic graft.
- 46. (New) The method of Claim 44, wherein a T cell of the graft recipient is stimulated.
- 47. (New) The method of Claim 44, wherein the therapeutic gene is a cytokine, an interleukin, a notch-ligand, a notch receptor, or a cell-protective gene.

48. (New) The method of 44, wherein the therapeutic gene is IL-4, IL-10, viral IL-10, IL-12p40, IL-13, hemoxygenase-1, CTLA-4, hSerrate-1, hDelta-1, notch 1-4, bcl-2, bcl-xl, or

bag-1.

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